

hours. The barometer at Nemuro fell to 741 mm. on August 28 at noon with the approach of the storm and rose to 759.5 mm. the next morning at 6 a. m. with the recession of the typhoon toward the Pacific. On the 24th and 25th this typhoon held complete and undivided sway over the whole Far East, the pressure and winds being controlled by it from southern Manchuria down to the Sulu Archipelago, over a distance of at least 2,000 miles. The steamers *President Madison*, *President Cleveland*, U. S. S. *Jason*, and U. S. S. *Parrot* were buffeted by the gales of the typhoon in the Eastern Sea.

The arrival of the *President Cleveland* with the honorable Secretary of War on board was delayed one day on account of the typhoon which the steamer encountered in the Eastern Sea. This typhoon and delay were mentioned in the proclamation of the Governor General of the Philippines transferring from August 31 to September 1 the special public holiday proclaimed on the occasion of the visit of the Secretary of War.

BUCKET OBSERVATIONS OF SEA-SURFACE TEMPERATURES

By GILES SLOCUM

STRAITS OF FLORIDA AND CARIBBEAN SEA

Table 1 shows the average temperatures for the Caribbean Sea and the Straits of Florida for August of each year from 1919 to 1930, inclusive, and Table 2 summarizes the temperature for August, 1930, in the same areas. The chart shows the number of observations taken in August, 1930, within each 1° square and mean temperature data for subdivisions of the areas considered.

For more detailed information regarding the methods of treating data, see the January, 1931, issue of the MONTHLY WEATHER REVIEW.

After remaining nearly stationary through much of July, the mean surface temperature of the Caribbean Sea rises throughout August, but at a rate somewhat less marked than during the spring and early summer weeks. In each of the 12 years treated (1919-1930) August has been warmer than July of the same year, and the August 11-year mean temperature (1920-1930) for each of the 5° subdivisions of the Caribbean is higher than that for the same area in July.

August is the warmest month in the Straits of Florida, and there is practically no variation of the mean temperature from one quarter month to the next, the 11-year average for each of the quarters of August being 83.9°.

The local distribution of temperatures remains much the same as in July. The straits are usually warmer than

any portion of the Caribbean, the western Caribbean warmer than the eastern, and the northern warmer than the southern except at the eastern extremity.

The differences from east to west are, however, less regularly progressive from lower temperature to higher than in July, and the average temperature is practically at a common level in all portions of the southern Caribbean except in the relatively cool central section.

The August, 1930, temperatures were above average in the Straits of Florida and the northern and extreme eastern Caribbean Sea and close to or below average in the southern Caribbean. The sea as a whole was, for the sixth consecutive month, warmer than the average.

TABLE 1.—Mean sea-surface temperatures in the Caribbean Sea and the Straits of Florida for August, 1919-30

Year	Caribbean Sea		Straits of Florida	
	Number of observations	Mean temperature	Number of observations	Mean temperature
1919 ¹	87	82.6	20	83.8
1920.....	157	81.4	47	82.5
1921.....	280	81.6	91	83.4
1922.....	192	81.5	70	84.0
1923.....	315	81.3	87	83.1
1924.....	318	82.5	121	84.9
1925.....	494	82.3	116	84.3
1926.....	491	82.9	142	84.1
1927.....	502	82.8	211	84.8
1928.....	566	82.6	166	84.0
1929.....	716	82.3	205	83.2
1930.....	589	82.5	153	84.3
Mean (1920-1930).....		82.2		83.9

¹ Not used in computations because of insufficient data available.

TABLE 2.—Mean sea-surface temperatures (°F.) and number of observations, August, 1930

Quarter	Period	Caribbean Sea				Straits of Florida			
		Number of observations	Mean	Departure from 11-year mean (1920-1930)	Change from preceding month	Number of observations	Mean	Departure from 11-year mean (1920-1930)	Change from preceding month
First.....	Aug. 1-7.....	136	°F.	°F.	°F.	87	°F.	°F.	°F.
Second.....	Aug. 8-15.....	143	82.1	-----	-----	41	84.2	-----	-----
Third.....	Aug. 16-23.....	153	82.3	-----	-----	38	84.2	-----	-----
Fourth.....	Aug. 24-31.....	157	82.8	-----	-----	37	84.6	-----	-----
	Month.....	589	82.9	-----	-----	153	84.2	-----	-----
			82.5	+0.3	+0.5		84.3	+0.4	+1.3

Distribution of Greenwich Mean Noon Bucket Observations of Sea-Surface Temperatures, August, 1931 (Plotted by Gilles Slocum)

